

MINNEAPOLIS, MN 55402-2100



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,316	08/24/2001	John T. Nordberg	2753.01US02	3885
24113	7590 11/07/2003		EXAM	INER
PATTERSON, THUENTE, SKAAR & CHRISTENSEN, P.A. 4800 IDS CENTER			PALABRICA, RICARDO J	
20 SOUTH 2TH STREET			ART UNIT	PAPER NUMBER

3641 DATE MAILED: 11/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/939,316	NORDBERG, JOHN T.				
Office Action Summary	Examiner	Art Unit				
**	Rick Palabrica	3641				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the o	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day fill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. I the mailing date of this communication. ED (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on 25 S	September 2003 .					
2a)⊠ _, This action is FINAL . 2b)□ Thi	s action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims	Jan anding in the application					
4) Claim(s) 1-4,7-15,17-20,22,24,26,28 and 29 is						
•	4a) Of the above claim(s) is/are withdrawn from consideration.					
	Claim(s) is/are allowed.					
7) Claim(s) is/are objected to.	Claim(s) <u>1-4,7-15,17-20,22,24,26,28 and 29</u> is/are rejected.					
8) Claim(s) are subject to restriction and/or	r election requirement					
Application Papers	Cicolion requirement.					
9) The specification is objected to by the Examine	r.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accep	oted or b) objected to by the Exa	miner.				
Applicant may not request that any objection to the	e drawing(s) be held in abeyance. S	See 37 CFR 1.85(a).				
11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Ex	aminer.					
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents	1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents	2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the prior application from the International But* See the attached detailed Office action for a list	reau (PCT Rule 17.2(a)).					
14) 🖾 Acknowledgment is made of a claim for domesti	c priority under 35 U.S.C. § 119(e) (to a provisional application).				
 a) The translation of the foreign language pro 15) Acknowledgment is made of a claim for domesting 	• •					
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)				
S. Patent and Trademark Office						

Application/Control Number: 09/939,316

Art Unit: 3641

DETAILED ACTION

- 1. Applicant's amendment of the specification and response to rejection of claims in Paper No. 14 is acknowledged. This paper is in response to Office Action dated March 21, 2003.
- Applicant traversed the objection to the specification and the rejection of claims.
 Applicant's arguments have been fully considered but they are not persuasive.

Applicant traversed the objection to the specification and the rejection of claims based on 35 U.S.C. 101 and 35 U.S.C. 112, on the grounds that the claims are "directed solely to nuclear fusion reactor systems and make no reference to commercial production of electricity by nuclear fusion." The Examiner disagrees.

First, claims 4, 14, 15, and 29, explicitly recite extracting electrical energy from the conducting spheres of the nuclear fusion reactor.

Second, the applicant's assertion that the utility of his claimed invention resides in a fusion reactor utilizing electromagnetic confinement fields is overly broad. As stated in page 4 of the 3/21/03 Office Action, the disclosure repeatedly emphasizes that the invention is directed to a new method and apparatus for the commercial production of electricity through the use of a nuclear fusion reactor (e.g., see the specification on page 4,last paragraph; page 5, lines 5+; page 7, lines 5+; page 9, lines 11+ and 16+; page 91, penultimate paragraph; page 102, last paragraph). While some of the claims (e.g., claim 1) are directed to solely to a nuclear fusion reactor, effecting fusion reaction is clearly not the purpose of the invention because the disclosure always relates this

fusion reaction to the commercial production of electrical energy. In fact, applicant even pronounces in the invention summary that his designs are the "first to offer, inexpensive, practically unlimited, almost totally clean energy."

Third, even assuming for the sake of argument that the utility of his invention is solely for effecting nuclear fusion by application of spherical electromagnetic fields (which is not the case), applicant has no showing of an operative embodiment for his apparatus. As stated in the previous Office Action, the specification is replete with statements of unknowns, statements of belief, statements of needs to fill information gaps, statements of intent or plans, and assumptions of success contingent upon success of other factors. The Examiner has provided in previous Office Actions detailed examples of these statements and assumptions made by the applicant himself that evidence a lack of an operative embodiment.

Applicant traversed the rejection of claims based on applied art. Again, the applicant's arguments are not persuasive because the features upon which the applicant relies are not recited in rejected claims(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Additionally, if said unrecited features are considered by the applicant to be <u>critical to his invention</u>, then such omission would amount to a gap between the essential elements. In this case, the claim(s) would be incomplete and would be rejected under 35 U.S.C. 112, second paragraph. See MPEP § 2172.01.

Applicant alleges that Priest (U.S. 4,354,999) does not disclose a plurality of conducting spheres arranged adjacent to each other and adjacent to the reactor core. The Examiner disagrees because Priest's lithium jacket 24 and spherical shell 12 are spherical and conducting. They are adjacent to each other because they are in a nested configuration. Note that the claim language "spheres adjacent each other" does not preclude a configuration of nested or concentric spheres. Applicant also alleges that Priest's spheres are not located adjacent the reactor core. The Examiner disagrees because the term "adjacent" is defined in the dictionary as meaning "close proximity", which is the case for Priest's invention. The same argument as above applies to applicant's traverse of Lasche (U.S. 4,735,762).

Applicant alleges that the apparatus of Hendry (U.S. 5,139,731) is a cyclotron that does not read on a reactor core containing fusionable material. The Examiner disagrees because Hendry's cyclotron volume 12 contains hydrogen ions. Hydrogen is a well-known fusion material and there will inherently be fusion among the hydrogen ions inside the cyclotron volume. Also, ion source volume and pumping volume 24 both include hydrogen ions that are conducting materials.

As to the spheres being adjacent to the core, note that Figs. 1 and 2 of Hendry show the ion source volume and pumping volume as being adjacent (i.e., in close proximity) to the cyclotron volume. While patent drawings are not drawn to scale, relationships clearly shown in the drawings of a reference patent cannot be disregarded in determining the patentability of the claims. See *In re Mraz*, 59 CCPA 866, 455 F.2d 1069, 173 USPQ 25 (1972).

Applicant traversed the use of Whittlesey (U.S. 3,378,446) in the rejection of claims. The Examiner disagrees because Whittlesey is used a secondary reference to modify the primary reference, Priest. Both these references are in the same field of endeavor, i.e., nuclear fusion, and the teaching in Whittlesey regarding extraction of electric energy is appropriate to use with Priest.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Specification

3. The specification is objected to under 35 U.S.C. 112, first paragraph, as failing to provide an adequate written description of the invention and as failing to adequately teach how to make and/or use the invention, i.e., failing to provide an enabling disclosure.

The reasons are the same as those set forth in section 4 of the 3/21/03 Office Action, said reasons being incorporated herein.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-4, 7-15, 17-20, 22, 24, 26, 28 and 29 are rejected under 35 U.S.C. 101 because the claimed invention as disclosed is inoperative and therefore lacks utility.

The reasons the invention as disclosed is inoperative are the same as the as those set forth in section 5 of the 3/21/03 Office Action, said reasons being incorporated herein.

Claim Rejections - 35 USC § 112

5. Claims 1-4, 7-15, 17-20, 22, 24, 26, 28 and 29 are rejected under 35 U.S.C. 112, first paragraph, for the same reasons as those set forth in section 6 of the 3/21/03 Office Action, said reasons being incorporated herein.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Application/Control Number: 09/939,316

Art Unit: 3641

6. Claims 1-3, 20, 24 and 26 are rejected under 35 U.S.C. 102(b) as being

anticipated by any one of Priest (U.S. 4,354,999) or Lasche (U.S. 4,735,762) or Hendry

Page 7

(U.S. 5,139,731).

The reasons for rejection are the same as those set forth in section 7 of the 3/21/03 Office Action, said reasons being incorporated herein.

7. Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Hendry.

8. Claims 4, 14, 15, 17 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Lasche. Note that Lasche discloses his invention induces a pulse of electric energy that is first stored kinetically, capacitively or inductively and then released smoothly to the power grid (see column 8, lines 44+).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 4, 14, 15 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Priest, as applied to claims1-3, 20, 24 and 26 above, and further in view of Whittlesey (U.S. 3,378,446).

The reasons for rejection are the same as those set forth in section 10 of the 3/21/03 Office Action, said reasons being incorporated herein.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick Palabrica whose telephone number is 703-306-5756. The examiner can normally be reached on 7:00-4:30, Mon-Fri; 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone can be reached on 703-306-4198. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-

1113.

RJP November 5, 2003

HAROLD J.TUDOR PRIMARY EXAMINER